California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-0106-8WDR*

FOR

EEL RIVER SAWMILLS
MOZZETTI SOLID WASTE DISPOSAL SITE NO. 2

Humboldt County

## GROUNDWATER MONITORING

The objectives of groundwater monitoring are; determination of groundwater gradient; leak detection; and evaluation of naturally occurring variations in groundwater quality, if any.

Monitoring wells Nos. 2, 3, 4-A, 4-B and any additional wells that may be installed shall be monitored as follows:

a. Static water levels shall be recorded in April and September of each year. Top of casing, depth to groundwater and water table elevation shall be reported in tabular fashion. Gradient contours shall be plotted, to scale, for each aquifer and each monitoring period.

b. Representative grab samples shall be collected in April and September of each year. Prior to sampling, the bore hole shall be properly purged. Purging protocol and field sampling logs including equilibrium measurements, pumping rate and other appurtenant information shall be submitted. Samples shall be analyzed for the following constituents.

**Monitoring Parameters**

| | |
|---|---|
| Sulfate | Hardness |
| Chemical Oxygen Demand | pH |
| Total Dissolved Solids | |

c. Every 3 years all wells shall be sampled for the Constituents of Concern listed below in addition to the monitoring parameters listed above.

**Constituents of Concern**

| | |
|---|---|
| Total Petroleum Hydrocarbons [1] | ICAP metals |
| Specific Conductance | Calcium |
| Magnesium | Potassium |
| Sodium | Fluoride |
| Nutrient Series | Alkalinity |
| Chloride | |

## SURFACE WATER MONITORING

The objectives of surface water monitoring are; to monitor the effectiveness of the best management practices; and monitor compliance with basin plan objectives pertaining to protection of the receiving waters.

1 Method 5030/8015 and Method 3350/8015 or other methodology, approved by the Executive Officer.

Representative grab samples from surface water drainages, S-1, S-2, and S-3 shall be analyzed for the following:

| | |
|---|---|
| Turbidity | Settleable Solids |
| Chemical Oxygen Demand | pH |
| Nutrient Series | Temperature |

Each rainy season surface water samples shall be collected once during the 4th Quarter (October-December) and once during the 1st Quarter (January- March) of the succeeding calendar year. Samples shall be collected immediately following rainfall events which produce runoff and need not be collected at the same time that groundwater monitoring samples are collected. In the event leachate enters a surface water conveyance system, surface water samples shall be collected and analyzed for the constituents listed in the leachate monitoring system below.

## LEACHATE MONITORING

The objectives of leachate monitoring are to characterize leachate quality and evaluate its potential impacts on receiving waters.

The landfill shall be inspected for leachate seeps monthly during the period October - May. An inspection log shall be included in the monitoring report. The log shall note, at a minimum, the date, time, flow, duration of flow, weather conditions and extent of the seep, (i.e., was it contained onsite or enter surface water drainage courses) and corrective measures employed. Regional Water Board staff shall be verbally notified within 24 hours in the event of an offsite discharge. Leachate seeps shall be corrected immediately upon discovery. If leachate is observed, a representative grab sample shall be taken and analyzed for the constituents listed below.

| | |
|---|---|
| Chemical Oxygen Demand | Biochemical Oxygen Demand |
| ICAP metals | General Minerals |
| pH | Total Petroleum Hydrocarbons [2] |
| Nutrient Series | Temperature |
| VOCs | |

## GENERAL INSPECTIONS

The landfill shall be inspected monthly during the period October - May for erosion, drainage problems, cover integrity (including any rodent damage), vegetation concerns and ponding atop the landfill. Problem areas shall be identified and corrected immediately. A log of the inspections and corrective measures shall be submitted with the monitoring report.

## SETTLEMENT MONITORING

The objective of settlement monitoring is to track the cumulative settlement of the low permeability layer in order to determine when the layer requires repair.

The site shall be visually inspected each winter for signs of ponding. The site shall be surveyed for settlement every five years after closure. Results of the survey and settlement evaluation shall be included in the July monitoring report. The survey shall be presented on 24" x 36" maps with a maximum 2-foot contour. The evaluation shall include:

2 Method 5030/8015 and Method 3350/8015 or other methodology, approved by the Executive Officer.

1. Initial closure grades and contours.

2. Current grades and contours.

3. Map showing any interim repairs to the vegetative layer and/or the low permeability cap.

4. Tracking forms showing cumulative settlement and/or repairs to the individual cover layers.

5. Iso-settlement contours of the vegetative layer and low permeability layer.

## REPORTING

**By July 15, annually,** monitoring reports shall be submitted to the Regional Board offices. Monitoring reports shall contain any information from monitoring performed more frequently than required or at locations not required by this Program. A summary of the previous years monitoring, data evaluation, data trends, problems, violations and corrective actions shall be provided.

The July 15 annual monitoring report shall present current and historical data plotted vs. time. Trends shall be evaluated.

Data shall be arranged in tabular form so that date, constituent and concentration are readily discernable. The monitoring report shall be transmitted in accordance with the General Monitoring and Reporting Provisions adopted by the Regional Water Board on February 3, 1971.

Ordered by _____

Lee A. Michlin
Executive Officer

June 28, 2001

*Temporary order number, and final number will be assigned when adopted

(mozMRP301)